

July 30, 2013

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Notice of *Ex Parte* Communication, WC Docket No. 13-184

Dear Ms. Dortch:

On July 25, 2013, Gary Rawson, Federal Programs Coordinator for the Mississippi Department of Information Technology Services, Tim Bryant, Technology Coordinator for the Jefferson Davis County MS School District, Terry Foley, Technology Coordinator for the South Tippah MS School District, Larry Gressett, Technology Coordinator for the Newton Municipal School District, Ross Randall, Technology Coordinator for the Lamar County MS School District, Pamela Tucker, Technology Coordinator for the Leake County MS School District (MS Technology Coordinators), spoke via telephone with Lisa Hone, Bryan Boyle, Regina Brown, Soumitra Das, Charles Eberle, and Mark Nadel of the Wireline Competition Bureau, and Nicholas Alexander of the Office of Strategic Planning and Policy Analysis. The purpose of the call was to discuss the school districts' broadband needs, capabilities, and costs, and to seek input on the Commission's July 23, 2013 Notice of Proposed Rulemaking in the above-referenced docket. The MS Technology Coordinators provided the following information during the call:

- *Broadband capacity and costs.* Broadband capacity and the cost of Internet access and transport within a school district's wide area network (WAN) vary due to a range of factors including whether the district is in a rural or urban area, the availability of high-capacity fiber connections, and the number of providers bidding on service. Lamar County's WAN delivers 1 Gbps to each school, at an average cost of \$1,020/month for each school, and the district pays \$3,875/month for 155 Mbps Internet access. Lamar County has 14 schools and each school is equipped with 1 Gbps LAN. Jefferson Davis County, a very rural district, provides 1 Gbps WAN connectivity to each school for \$1,500/month and pays \$1,750/month for 50 Mbps Internet access. Leake County, another rural district, does not have fiber connections to all buildings. Ms. Tucker explained that Leake County has 100 Mbps connections to all six schools, a career and technical center, and two additional buildings. The district's remaining buildings connect to an MPLS network over DSL lines. The district pays \$7,900/month for this configuration. Newton Municipal School District, a small, compact district, owns its own fiber network and purchases 50 Mbps Internet access through the state master contract.
- *WiFi infrastructure.* The MS Technology Coordinators each plan to deploy high-capacity WiFi networks. South Tippah recently issued a request for proposals (RFP) soliciting bids for deployment of district-wide WiFi infrastructure for the district's five schools, one career and technology center, and two administrative buildings. The district, which has 2,700 students, was quoted \$150,000, which would cover 150 – 170 IEEE 802.11n access points, wiring, and switching. The bids ranged from \$130,000 to \$150,000. Mr. Randall from Lamar County schools stated that schools typically require one wireless access point (WAP) per classroom, and several in common areas, though site evaluations are necessary to determine a school's specific needs. He explained that the price for WAPs varied considerably depending on the manufacturer and timing of the purchase. Lamar County schools have limited, outdated WiFi capability and were recently quoted \$120,000 for a complete WiFi infrastructure upgrade that includes 2-radio

wireless access points for a 1,500 student high school. Leake County is planning an RFP to overhaul its WiFi infrastructure, which Ms. Tucker said is essential for new testing requirements and bring your own device (BYOD) initiatives. She plans to rely on the state master contract rate of \$300/WAP.

- *Competitive bidding.* Mr. Bryant stated that it is difficult for a district to switch providers when the current provider owns the fiber connection to the school because that provider has likely already recovered the capital cost of deploying the fiber and no other provider is able to provide a competitive bid. He also explained that while he had the option of entering into longer term agreements (up to seven years), he prefers that his district enter into shorter contracts (usually three years) for WANs so that it can seek lower prices more frequently. South Tippah received four bids for its WiFi infrastructure initiative.
- *State master contract.* The Mississippi Department of Education has a statewide master contract for telecommunications services with AT&T. The State pays AT&T directly, with funds that include E-rate support, to serve districts that purchase service through the master contract. Districts that opt to seek bids on their own apply independently for E-rate support. Mr. Randall said that providers operating outside the master contract have greater flexibility to increase and reduce capacity so that a given school or district is not paying for more bandwidth than it needs but is able to increase capacity at times of high demand such as testing.
- *Funding for internal connections.* Mr. Bryant, Ms. Tucker, and Mr. Gressett urged continued funding of priority two E-rate funding for rural school districts in low-income areas. Mr. Bryant stated that the Jefferson Davis County district relies heavily on E-rate support to fund all technology services and infrastructure. He also encouraged Commission staff to re-examine the 2-in-5 rule. Mr. Foley explained that South Tippah moved forward with its WiFi infrastructure project without waiting for E-rate support despite needing the financial help because, as an 81% district, he knew that the district was unlikely to receive priority two funding in the near future.
- *Bandwidth utilization.* All participants agreed that bring your own device (BYOD) initiatives have rapidly increased bandwidth usage and will continue to do so.
- *Network security.* Ms. Tucker stated that network security is a major concern for districts, particularly as BYOD initiatives allow students to connect to school WiFi networks using devices that are not owned and controlled by the school. She explained that her district is reluctant to move forward with BYOD until it can purchase new switches and monitoring equipment to establish a strong network security infrastructure and that her district will not make those purchase without priority two E-rate funds.
- *Schools as anchor institutions.* Mr. Bryant stated that several businesses in Jefferson Davis County have access to high speed broadband because fiber has been deployed to serve schools.
- *Miscellaneous topics.* Mr. Bryant stated that high-capacity broadband connections have enabled distance learning in rural schools that often face teacher shortages. He also expressed opposition to a per-student cap on E-rate support.

Respectfully submitted,

/s/
Charles Eberle

Attorney-Adviser, Telecommunications Access Policy Division, Wireline Competition Bureau